Bubbling beneath the ice streams: subglacial plumbing mapped from space

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We have used repeat-track ICESat laser altimeter data to map active hydraulic signatures over the Whillans and Mercer ice streams for the period 2003-2006. The data have revealed the complexity of the subglacial system, and have shown further that it is highly dynamic, changing on time scales of a few months. For the first time, we are getting a glimpse into what the subglacial water system looks like under an ice stream, which is fundamental to how the ice streams flow.